Attorney Docket No.: FMCE-P145

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Johansen et al.	)	
Serial No.: 10/590,260	)	Group Art Unit: 2181
Filed: 08/18/2006	)	Examiner: Chun Kuan Lee
For: Control System for a Subsea Installation	)	

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APPLICANTS' REPLY BRIEF

This Reply Brief is responsive to the Examiner's Answer dated November 24, 2010.

I. The Examiner's Reliance on the Telephone Interviews of 12/10/2009 and 12/11/2009 is Misplaced:

In several sections of the Examiner's Answer, the Examiner refers to certain statements which applicants' attorney apparently made during two telephone interviews that took place on December 10-11, 2009. For example, on page 11 of the Examiner's Answer, the Examiner quotes what purports to be applicants' attorney's admissions as to what constitutes the "core novelty" and "overall inventive concept" of the claimed invention. However, the language quoted is nothing more than the Examiner's Interview Summary from paragraphs 11 and 12 of the Final Office Action of December 16, 2009.

Moreover, applicants' attorney disagreed with the accuracy of certain statements which the Examiner attributed to applicants' attorney and accordingly submitted his own Interview Summary in an Amendment After Final dated February 16, 2010. In order to clarify applicants' position regarding what was and was not said or agreed to in the interviews, the following is the complete text of the Interview Summary applicants provided in the Amendment After Final:

Thus, the Examiner and applicants' attorney apparently disagree regarding several of the conclusions on which the Examiner relies to support his rejection of the claims. Therefore, the Examiner's reliance on such statements is improper.

Accordingly, applicants respectfully request that the Board rely on the language of the claims at issue and the actual teachings of the cited references in discussing the propriety of the Examiner's rejections.

II. Applicants' Reply to Issue A1(i):

On pages 12-15 of the Examiner's Answer, the Examiner addresses applicants' argument that Sitte does not disclose a plurality of devices which are each connectable to a cable unit having a junction and which each comprise a bus controller having a unique address, as required by claim 16.

In response to this argument, the Examiner states as follows:

> The Examiner respectfully disagrees, and as discussed in detail above, Sitte does teach appellant's overall inventive concept; therefore, the combination of the references would suggest appellant's claimed invention. (Examiner's Answer, page 13, lines 13-15).

The Examiner further asserts that Sitte does indeed disclose a plurality of devices which are each connectable to a cable unit having a junction and which each comprise a bus controller having a unique address "because Sitte's disclosure is functionally equivalent to appellant's claimed feature." (Examiner's Answer, page 13, lines 19-20, emphasis added).

With all due respect to the Examiner, applicants submit that such ambiguous and unsupported assertions are not sufficient to support the present rejection. However, applicants will nevertheless address these assertions.

First, Sitte does not teach applicants' overall inventive concept. To paraphrase claim 16, applicants' claimed invention is directed to a control system for a subsea installation which comprises a control module, a common bus which is connected to the control module and comprises at least one cable unit, and a plurality of devices which are each removably connectable to the cable unit.

Each device comprises a bus controller having a unique address, and the control module comprises means for communicating with each device over the common bus. In addition, the cable unit comprises a junction and a plurality of branch cables, and each branch cable comprises a first end which is connected to the junction, a second end which is connected to a corresponding electrical connector that in turn is removably connectable to one of the devices, and at least two control signal supply cables. Moreover, each of the two control signal supply cables extends between the first and second ends of the branch cable and is connected to the junction and a corresponding electrical connector, and both control signal supply cables are directly electrically connected to each other at the electrical connector.

Similar to applicants' claimed invention, Sitte discloses a control system which includes a bus for connecting a plurality of devices to a control module. However, Sitte does not disclose a control system which includes the particular combination of control module, cable unit and devices set forth in claim 16. As an example, unlike applicants' claimed invention, Sitte does not disclose a control system in which a plurality of devices having bus controllers are connected to a control module via a junction. Sitte's "smart" devices 14, 16, 18, 19, 21, 27 and 29 have bus controllers, but these devices are not connected to the control module 12 via a junction. Instead, the devices 14, 16, 18, 19, 21, 27, 29 are connected to the control module 12 via a single cable 10. Therefore, Sitte does not teach applicants' overall inventive concept.

Also, Sitte clearly does not disclose a cable unit which comprises a junction to which a plurality of devices having bus controllers are removably connectable, as required by claim 16. As discussed above and in the Appeal Brief, the only ones of Sitte's devices to comprise bus controllers are the "smart" devices 14, 16, 18, 19, 21, 27, 29. However, these devices are not connected to Sitte's "junction" 20. Moreover, the devices which are connected to Sitte's junction 20, namely the devices 22, 26, 30 and 34, do not include bus controllers.

The Examiner appears to argue that, since the devices 22, 26, 30, 34 need to be identified to the control module 12, these devices must include something equivalent to a bus controller (page 14, line 26 – page 15, line 8). However, contrary to the Examiner's assertion, nothing in Sitte suggests that the devices 20, 22, 30, 34 need to be identified to the control module 12. Sitte discloses that these devices merely provide a signal on their respective signal lines which represents their status. The "junction" 20 then receives these signals, formulates a data packet and transmits the data packet to the control module 12 (col. 7, lns. 55-61). One may therefore reasonably assume that the only thing this data packet identifies to the control module 12 is the status of the devices 20, 22, 30, 34.

Furthermore, that the devices 20, 22, 30, 34 do not comprise bus controllers is confirmed by the following language in Sitte:

> The use of an intelligent node device such as that identified by reference numeral 20 permits the sensor actuator bus of the present invention to be

utilized with numerous devices without requiring that each of those devices be provided with the capability to formulate and transmit its own message. Instead, the simple status of the devices connected to an intelligent node is received by it and subsequently transmitted to the PLC 12. (col. 7, ln. 61 – col. 8, ln. 1, emphasis added).

Therefore, Sitte clearly does not disclose a cable unit which comprises a junction to which a plurality of devices having bus controllers are removably connectable.

III. Applicants' Reply to Issue A1(ii):

On pages 15-16 of the Examiner's Answer, the Examiner addresses applicants' argument that Sitte does not disclose that each "branch cable" which is used to connect a corresponding device 22, 26, 30, 34 to the junction 20 includes a second end which is connected to a corresponding electrical connector that in turn is removably connectable to the device, as required by claim 16.

The Examiner's responses to this argument are not persuasive. First, the Examiner asserts that since Sitte teaches appellant's overall inventive concept, the combination of the references would suggest appellant's claimed invention. (Examiner's Answer, page 16, lines 13-15). Next, the Examiner argues that Sitte suggests that the cable unit is removably connectable because he discloses that the devices are removably replaced or added (Examiner's Answer, page 16, lines 16-18). However, this language applies to the smart devices, not the devices 22, 26, 30 and 34. Finally, the Examiner asserts that since applicants'

and Sitte's inventions both operate in accordance with CAN protocol, "the operation of the two architectures is functionally equivalent." (Examiner's Answer, page 16, lines 19-22).

Applicants' trust that the Board will conclude that the above assertions are insufficient to either support the Examiner's position or rebut the arguments applicants presented in their Appeal Brief concerning this issue.

IV. Applicants' Replies to the Remaining Issues:

Applicants maintain that the Examiner's arguments regarding the remaining issues are insufficient to either support the present rejections or rebut the arguments applicants presented in the Appeal Brief.

V. Conclusion

In light of the foregoing, applicants submit that claims 16, 17 and 19 are patentable. Accordingly, applicants respectfully request that the Examiner's rejection of these claims be reversed. Favorable action is solicited.

Respectfully submitted,

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